

**Sounding the Chesapeake:
Indian and English Soundways
in the Settling of Jamestown**

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by

[Richard Rath](http://way.net/rcr/chesapeake)

<http://way.net/rcr/chesapeake>

A Sea Wreck

When ratling Thunder ran along the Clouds;
Did not the Sayers poore and Masters proud
A terror feele as strucke with feare of God?
Did not their trembling joynts then dread his rod?
Least for foule deeds and black mouth'd blasphemies,
The ruffull time be come that vengeance cryes.

-- Translation of Lucretius, quoted in John Smith's *Generall History*.⁽¹⁾

A tempestuous noise of thunder and lightning heard. Enter a shipmaster and a botswain.
-- setting of the opening scene of Shakespeare's *The Tempest*

In 1609, two years after the founding of Jamestown, a convoy of seven large ships and two pinnaces (small scouting ships) set out from England with sorely needed supplies and more settlers for the struggling colony. Aboard the flagship, the *Sea Venture*, were George Somers, the leader of the expedition, and Thomas Gates, the new governor. Gates carried instructions from the Virginia Company for bringing order to the infant colony, which was beleaguered by dissent and illness from within and from without by its ambivalent relations to the Powhatan people upon whose territory the colonists encroached -- and upon whose goodwill they depended for food in the absence of English supplies.⁽²⁾

Just a few days shy of Virginia, the convoy fell into "a taile of the West Indian Horacano." One passenger aboard the *Sea Venture*, William Strachey, described the storm so compellingly that it may have later inspired Shakespeare to write *The Tempest*. Although modern writers tend to focus on the visual details in Strachey, the sounds of the hurricane played a critical role, not only in the immediate outcomes, but in the government of Jamestown as well. At the storm's onset Strachey remarked that "The wind singing and whistling most unusually" had caused the *Sea Venture* "to cast off our pinnace," which was in tow. One ship was thus lost even before the hurricane had descended in earnest. "A dreadful storm and hideous" immediately ensued, "swelling and *roaring* as if it were by fits."⁽³⁾

The sounds of the storm "overmastered the senses of all," wrote Strachey. "The ears lay so sensible to the terrible cries and murmurs of the winds" that even the most seasoned sailors were terrified and shaken. The thunder, in turn, drowned out the winds and the roaring sea. This constant roaring din,

lamented Strachey, "worketh upon the whole frame of the body," laying a sickness upon it "so insufferable" that it "gives not the mind any free and quiet time to use her judgment and empire."⁽⁴⁾ The possession of reason seems to have been contingent upon an attenuated and governable sonic environment.

The tempest's visceral roaring affected more empires than those of the mind. It had both immediate and long-term consequences for the survival not only of the convoy, but of Jamestown and Virginia. Immediately, the sound of the storm made communications onboard impossible. The "clamours" of "women and passengers not used to such hurly and discomfort" and the prayers and shouts of the more seasoned crew were all "drowned in the winds and the winds in thunder." There was "nothing heard that could give comfort."⁽⁵⁾

The roaring sea, howling wind, and constant thunder also drowned out ship-to-ship communications, with dire consequences. Normally, during times of calmer weather, convoys communicated via flags, drums, trumpets, and shouting. At night, flashing lanterns replaced the flags. But in poor visibility conditions, the convoy depended solely on sound to stay together and act in concert. Drums, trumpets, shouting, and the sounds of cannon and gun shots conveyed simple messages about direction and intent within a convoy. Under normal conditions, Admiral Somers "spoke" to the rest of the convoy by these means and they replied the same way. In the darkness and rain of the storm, however, the Virginia Company ships could not see each other, much less flags. The hurricane "beat all light from Heaven, which like an hell of darkness, turned black upon us." It smothered all fires. Even the cooks' stoves sheltered beneath the decks were drowned. Lanterns and cannon would not work. If the Admiral and his ships were to 'speak' to each other, they would have to do it out loud rather than by sight under such conditions. But Gabriel Archer, aboard one of the smaller ships, wrote that the storm was so loud that no one could "hear another speake." Drums, trumpets, and shouts could not be heard above the terrible din. One ship could not know another's place in such a "roaring sea." According to Archer, they were "thus divided" from each other by the sounds of the storm.⁽⁶⁾

In the longer term, the sound of the hurricane decapitated the colony: it "separated the head from the body, all the vital powers of regiment being exiled with Sir Thomas Gates" aboard the *Sea Venture*. The rest of the convoy, the "body," foundered for nearly a week before finding each other. Only then did they limp onward to the Chesapeake Bay, leaderless and paperless, for they neither saw nor heard any sign of the *Sea Venture*. The stragglers let loose "a tempest of dissension" upon their arrival. Led by Archer and George Percy, they started a mutiny and nearly took the life of John Smith, who had been the governor and de facto leader of the colony.⁽⁷⁾ But Jamestown would not run wild; it -- along with Gates and most of the *Sea Venture's* passengers and crew -- would narrowly survive.

Early American Soundscapes

Gates, Smith, Strachey, and the rest of the Jamestown settlers inhabited soundscapes different from our own. The sounds themselves seem at once both familiar and strange -- thunder, but on a motorless sailing ship, the peal of bells, but in a new colony. The ways they thought about sound were much different from ours, part of a world not so much lost as set aside since then.

Two terms are defined here to help navigate the differences and similarities between our audible worlds and "theirs." First, "soundways" are the *ways* that people expressed their attitudes and beliefs about sound (not the attitudes and beliefs, or the expressions, but the ways between them: practices, interpretations, techniques). Second, "soundscapes" are the audible worlds people occupy, constructed from negotiating their soundways. Soundscapes are as much mental as physical concepts, much like landscapes.

People who read academic papers tend to occupy a vast and somewhat homogeneous late modern soundscape while they read, one that has been colonized over the past three centuries by the increasing importance of literacy and visual criteria for establishing the legitimacy of any claim. Reading is done through the eyes and observability is usually necessary for a claim to be considered valid. While occupying this vision-dominated world, readers and academics tend to reduce the soundscape to that which can be represented visually in written or printed language: thus the world is divided into the "literate" and the "oral." Orality has become a foil for the literate in this world, a state of nature with no history due to the ephemerality of speech in comparison to print. Criticisms of this "great divide theory" abound, rightfully comparing it the divide of previous eras between "civil" and "savage." But even so, how can historians -- those most text-bound of all social scientists -- get through, over, or around the problem of the ephemerality of speech? The answer here has been to look beyond orality to the full scope of the soundscape, and to focus on soundways rather than ephemeral sounds or equally elusive attitudes and beliefs. What people did to construct and respond to their soundscapes is well-documented, but because of the focus on vision in the late modern academic sensorium, it has been with a few exceptions, ignored outside the realm of speechways.⁽⁸⁾

This paper, and the larger work from which it draws, can be thought of as a conversation between this somewhat idealized late modern soundscape and the soundscapes of the past. To do so, we explore sounds that are now considered to be agentless puffs of air: thunder in particular. Agency is then reintroduced without voice in the form of such sonic instruments as bells, sounding boards, and listening posts, among others. These always had some intelligent will behind either their design or use. Voice will be considered, but not limited to speech. Instead the focus is on its non-verbal or paralinguistic qualities -- it will be considered as sound rather than simply voiced language or audible writing. The evidence is surprisingly easy to find once the mental shift from oral to aural has been made. The reader here will gain a richer description of Chesapeake soundways, but at the expense of some of the theoretical clarity gained in the dissertation from treating agentless sounds, instrumental sounds, and vocalizations separately.⁽⁹⁾

The larger project considers the soundways of African Americans, Native Americans, and European Americans between 1600 and 1800, exploring how "their" soundways transformed into "ours" in the eighteenth century. The present paper sets aside that transformation to explore in some detail the soundscape of a particular time and place, namely Jamestown and the Chesapeake in the first fifteen years of continuous European settlement. For a few ideas, such as beliefs about thunder and bells, I have returned to English sources, or, -- as in the case above -- attended to people bound for Virginia before they actually arrived.

The early years of Chesapeake colonization help show the significance of the soundscape in two particular arenas, namely in the construction of a civil society and in cross-cultural relations, in this case between the English and the Indians in the Chesapeake region. The significance of soundways for understanding the construction of civil society should already be somewhat clear from the Bermuda example and is developed further below. The importance of soundways to cross-cultural relations with Native Americans is then discussed in the last section.

How Thunder Cracked

While the hurricane that befell the 1609 convoy was perhaps the most dramatic storm, sailors and settlers alike had noted the violent sounds of the American "wilderness" before. Christopher Columbus had met thunder and lightning that made it seem "as if it were the end of the world." Walter Raleigh's Virginia-bound fleet was held at bay by "a great storm of thunder and wind" at Plymouth (in old England) in 1583. Thunder, rain and hail battered the frail beachhead colony at Roanoke so much that it

was nearly abandoned in 1586. In 1607, even as the *Susan Constant*, the *Discovery*, and the *Godspeed* approached the Chesapeake Bay carrying the first crew of Jamestown settlers, they were caught in a tropical storm that struck them all night with "thunders in a terrible manner." The thunder would not have been a surprise though, as by that time the western Atlantic world's remarkable tempests were common lore among mariners and explorers.⁽¹⁰⁾ In order to understand the importance the English assigned to thunderstorms it makes sense to explore how they understood the subject.

At the outset of the seventeenth century, English people accounted for thunder and lightning in two general ways, one drawing on mechanical, the other on spiritual causes. These two styles of interpretation were not mutually exclusive, though each would follow its own trajectory over the course of the next two centuries. The mechanical explanations did not depend on the visual criterion of observability demanded today. Sound was conceived of as a tangible, mechanical force that could push, pull, and otherwise directly act upon physical objects. Within both the material and spiritual styles of explanation there were competing notions as well. Simon Harward, a resident of Banstead, a small rural town south of London, summarized a typical set of these beliefs in his 1607 pamphlet, *A Discourse of Lightnings*. He was writing to reassure the people of a neighboring town after their church had been struck in a storm. Because he was outlining various beliefs about thunder and lightning, some of which he agreed with, and others which he did not, his pamphlet is a fair indicator of the gamut of beliefs at the time of the Jamestown voyage.⁽¹¹⁾

In early seventeenth-century mechanistic explanations of thunder, sounds physically acted on one another, and on material objects, too. Thus thunder behaved as a tangible force. The peals of a bell or the report of a gun might be used to disperse it. Its sound was thought to do physical damage, including killing people and destroying buildings. In the mechanistic -- or as he called it, "philosophicall"-- part of Harward's account, thunder occurred when the planets somehow lifted watery vapor along with "fiery spirits and exhalations" from the earth into the upper atmosphere, described as a very cold place. There, the vapor "is thickned into a cloud, and the exhalation (which was drawne up with it) is shut within the cloud." The hot air, unable to find passage out of the now-solidified and cold exterior of the cloud, had to force its way. If the "sides" of the cloud were thick, and the hot air plentiful and dry, then the escape would be marked by thunder with lightning. But "if the clowd be thin, and the exhalation also rare and thin, then there is lightning without thunder."⁽¹²⁾ Though by the title of his pamphlet Harward seems to emphasize the visual aspect of the phenomenon, it is clear that lightning without its accompanying thunder was considered weak. Sound was at the source of its power.

The mechanistic explanations had distinctly gendered overtones to them. Strachey's account of the *Sea Venture's* exploits was originally a private letter sent to an unnamed English gentlewoman, possibly the wife of a well-placed Virginia Company patron. On the whole, this private letter (only published in 1625) was much more steeped in sonic description than his other Virginia history, which he wrote for an audience whose gender was unmarked. It was also more "sonic" than the only other publication recounting the wreck of the *Sea Venture*, which like Strachey's other work, was written for a general audience. In *True Reportory*, Strachey discussed the other-worldly aspects of the storm's thundering and roaring as well as the practical effects of the din, but he never raised the 'mechanical' issues. He was highly technical in his Latin description of the diabolical causes for the excess of thunder in the Americas, so it was not a question of his speaking down to his addressee -- he was in fact addressing a well-educated woman of higher rank than himself.⁽¹³⁾

Mechanistic accounts of thunder and the power of sound were the product of secular learning available only to elite males. Harward, who had to establish the legitimacy of his authorial voice -- quite literally, his authority -- highlighted the "philosophicall" explanation of thunder. Yet he was trying to reach and reassure, rather than distance himself from, a more general readership. As if to offset his readers'

suspicion that he might be too bookish, he concluded his material explanation by likening thunder to familiar sounds that both he and his readers knew well. His homely analogies show how the early modern English soundscape is foreign to ours, yet still familiar and in many ways recognizable. Thunder cracked aloud like "a Chestnut in roosting among cinders," or like "a bladder filled with air, being violently broken" or as "When green wood is burned, [and] the spirits burst out with some little crack," or like the much louder sound of "gunpowder issuing out of ordinance." Of course, "the clowdes then which far exceed the greatnesse of mountaines must needs give out a more forcible roaring."⁽¹⁴⁾

Size was not the only reason that thunder was louder than a gunshot or a burst balloon, though. Ultimately, Harward believed that thunder was the voice of the divine will. "There is added," he confided, "a more principall operation" than the mechanical forces, namely "the handie worke of God, whereupon thunder in the scriptures is called *the thunder of God*," and "*the voice of thy* [i.e., God's] *thunder*." He notes further that "*the Lord thundred out of heaven and the most highest gave out his voice, hailstones, and coales of fire*." Ending his explanation of the first cause of thunder and lightning, Harward quoted the divine admonishment of Job, in which God demanded to know who it was that divided "*the way for the lightenings of the thunder*." Note that Harward categorized lightning as a property of thunder, the opposite of today's conceptions of the phenomenon.⁽¹⁵⁾

Although Harward had definite opinions as to the true interpretations of thunder and lightning, he presented a range of opinions with which he disagreed, too. He acknowledged, but discounted, the idea that thunder and lightning were caused by devils. He also dismissed the idea that the damage from the storm indicated God's particular displeasure with the town it had struck. While God was the first cause, the storm was not, as some feared, an act of divine retribution. Harward thought it was rather a test of faith, much like those Job endured, for although the church had been burnt, no people were hurt and a general conflagration never broke out.⁽¹⁶⁾

While Harward minimized the 'diabolical origins' explanation of thunder, others put more stock in it. The *Sea Venture* ran aground on the shoals of "that dangerous and dreaded island, or rather islands, of Bermuda." Because of their terrible "tempests, thunders, and other fearful objects," sailors had come to call them "the Devil's Islands," in keeping with a commonplace belief that thunder was the work of demons.⁽¹⁷⁾ To the lost would-be Virginians, and most other Europeans at the time, no sound went without some willful being behind it, whether seen or invisible. The greater the force of the sound, the more powerful was its source. The Bermuda storms, which would "rather thunder than blow" were not perceived as just physical patterns in an endless chain of reactions to visible conditions.⁽¹⁸⁾ The castaways, in line with earlier European explorers, understood thunder to be the work of powerful forces, whether mechanical, providential, diabolical, or all three. Sailors were not the only ones who believed in "diabolical" explanations. Gentlemen and clerics often mentioned thunder as the work of the devil, demonic forces, or even popes.

For a church's bells to be struck and melted in their steeple, as they were in the in the storm that caused Harward to write his pamphlet, was considered an ominous event. Medieval Europeans, the English included, commonly believed that the sound of bells could ward off thunder and lightning.⁽¹⁹⁾ Harward's readers wanted to know why it had not worked. Bells were supposed to dispel the thunder, not the thunder the bells.

Priests and congregants had long believed that thunder and lightning would destroy church bells that had not been "christened and hallowed." The ceremony also was supposed to made the bells capable of dispelling thunderclouds. Once baptized, bells' inscriptions, saying things like "*fulgura flango*" ("I subdue the thunderbolt"), were thought to help as well. Bell baptism had fallen into official disfavor

during Elizabeth's reign, but was still widely believed to be effective when Harward wrote about Blechingley's ring of bells in 1607. Harward, whose beliefs leaned strongly toward the Reformation, pointed out that all but the newest of Blechingley's ancient church bells "had the blessing and baptizing at that time used and were halloed by that prayer in the Masse booke" which read:

Almightie everlasting God, besprinkle this bell with thy heavenly blessing, that at the sound thereof, the fiery darts of the enemy, the stroke of thunderbolts, and hurts of tempests may farre be put to flight. ⁽²⁰⁾

Keith Thomas calls bell baptisms a form of "word magic," in which the bell was supposed to do its work by carrying the priest's invocation and the words inscribed in the bell itself to the heavens in its peals, there battling with the demons thought to be at the source of thunder or convincing God to take pity. In part this was true, but the Protestant rejection of word magic did not entail a disbelief in the efficacy of sound. Dissenters objected to the consecration of bells because word magic placed the priest or sorcerer above God, from whom they believed the thunder actually ensued, even keeping the idea of it as God's voice.

Attention to the full range of English soundways rather than just the "orality" allowed by the concept of "word magic" discloses a situation more complex than a simple decline in irrational superstitions. In the early seventeenth century, the science that Thomas asserts killed word magic was more concerned with explaining the efficacy of willful sounds than with dismissing them as irrational. Scientific folk in early seventeenth-century England believed "that by the stirring of the air" with the sounds of bells, "the cloudes may soon be dispersed or driven away." Here, sounds were conceived as tangible particles, part of a pre-Cartesian mechanical universe, spreading out like the ripples in a pond or a shotgun blast until they met and countered the sounds of the thunderstorm. "To shoot up ordinance into the aire," claimed Harward, was as effective as ringing a bell. The bullets and cannonballs themselves had no effect, though. Like "our sight," such projectiles traveled in a "right line," displacing little of the vaporous matter constituting storm clouds. It was the sound of the shot that did the work. This, thought Harward, was also the reason that lightning was seen before thunder was heard. The former traveled directly, while the latter spread out, covering more territory, but slower. ⁽²¹⁾ Bells could neither influence God's will, nor could they talk, but their sounds were still thought to be powerful in a tangible way.

The sound of bells was simply too important to silence in early modern England. Their tolls were a sort of cultural glue that extended the limits of community beyond the face-to-face world of speech. Some Londoners spent their whole lives within the sonic reach of one or another set of parish bells. A soul's crossing from the invisible world to this one -- birth -- was marked by one peal of bells. Crossing in the other direction -- death -- was marked by another. Death knells told the age and gender of the decedent. People far from the church were thus still included in the community of sounds. Peals were intended not just for the ears of the earthbound, though. The heavens were still meant to hear them too. This extension of human reach into the invisible world has been lost to us as all but a superstition or parochial folk belief, but in a world of powerful, agentive sounds, such beliefs made sense.

Patience and Delivery

The roaring sea that wrecked the *Sea Venture* deposited its passengers into a political theorist's dream laboratory, the uninhabited islands of Bermuda. The would-be Virginians had to build what civil and social order they could from scratch. Their ship was destroyed, leaving no hope for an immediate escape, and somewhat dicey long-term prospects. Survival was not much of an issue. There were plenty of life-sustaining plants, a sea full of cattle-sized sea tortoises, fish, and other edibles, European pigs left on the island to breed decades before, and myriad birds. ⁽²²⁾

Admiral Somers took charge of trying to fashion new vessels. Crews salvaged parts from the wrecked *Sea Venture*. They scrapped all the wood, battered and cracked as it was. There was plenty of that available on the islands. Every scrap of metal, however was carefully pulled out in the hope that they could fit new vessels.

One metal instrument was put right to use rather than being saved for the new vessels. The would-be governor Gates used the *Sea Venture's* bell to create and maintain a social order recognizable to the castaways. Strachey reported that "every morning and evening at the ringing of a bell" the whole company was gathered together, public prayers were said, and the roll called. Anyone not brought in by the bell was "duly punished." On Sundays, they were called by the bell twice more than usual for sermons on the importance of "thankfulness and unity, etc."⁽²³⁾ The bell served civil and religious purposes together, showing how closely the earthly and invisible worlds were intertwined in the early seventeenth century. The bell notified the castaways that it was time for both roll call and worship. It apprized the invisible world -- and not just of God, for this was reputedly the Devil's Island -- that the congregation was assembling. Here was the cultural glue Gates needed, and it held together not just the visible, but the invisible bonds that made for a working social order in the seventeenth century. The sound of the bell was powerful because it allowed Europeans to traffic in the invisible world of human and spiritual relations. Rather than understanding them as some sort of 'face-to-face' social order, we might better think of them as fluent in a mode of invisible, sonic representation that was to be largely set aside in favor of the visible world over the next two centuries.

In a land with no churches or courts, the sound of the bell served as the tonic on which to build social order. People had to wander off, out of sight of one another, in order to obtain food and other materials needed for rebuilding the ship. The bell called all within earshot together, literally ringing them in. Those beyond the bell's range, either beyond earshot or beyond obeying its toll, were in the wild, and prolonged contact with wildness could tear the community apart, draining resources and threatening its survival.

A series of "devilish disquiets" plagued the unity of the frail little colony. From the start, some castaways had questioned Admiral Somers's authority on land. And while Thomas Gates had papers to govern Virginia, he had none for the Bermudas. Some of the *Sea Venture's* Company thought the island held out better prospects than Virginia, and tried to secede. The loss of manpower would have set a dangerous example in a situation where the escape of any from the island depended on everyone working together. A rumor that Virginia was nothing but work and wretchedness started, "first among the seamen, who in time had fastened onto them (by false baits) many of our landmen likewise" even some who were well respected on account of their piety. "This, thus preached and published each to other, . . . begat such a murmur" that it threatened the company's ability to effect an escape. Murmuring was often associated with dissatisfaction in Virginia.⁽²⁴⁾ Some of the malcontents were suspected of being "Brownists", that is Puritans, adding to their seditiousness in Strachey's opinion. Brownists could be told because they had to be forced to pray aloud from the book of common prayer. They considered voicing Anglican formal prayers to be akin to lying or swearing. The first rebels were sentenced to live on a wild outlying island and they soon begged to come back, which Gates allowed. A minister's clerk named Stephen Hopkins then publically made "substantial arguments both civil and divine (scripture falsely quoted)" that Gates's authority as governor ceased with the shipwreck, and that "they were all then freed from the government of any man." The governor declared that Hopkins and his followers were guilty of "murmuring and mutiny."⁽²⁵⁾

Gates used the *Sea Venture's* bell to hold the provisional little Bermudian society together. He had it rung to assemble the whole company, bringing Hopkins before them all in manacles. The chains bound the wildness and anarchy promised by Hopkins's words, but the sound of the bell was what bound the

community, Hopkins, and Gates together in a public enactment of civil government. Hopkins was charged with mutiny and rebellion for his murmuring, and sentenced to death. He "made such a moan," however, that the governor reprieved him. Another rebel perhaps should have murmured. Henry Paine said "let the governor (said he) kiss, etc." with "etc." being too "unreverent" for "the modest ears" of the woman to whom Strachey wrote of the event. His words were "brought the next day unto every common and public discourse." He was shot before a firing squad after a trial in front of the assembled colony, again called together by the bell. [\(26\)](#)

During the nine months that they were stranded on the Bermudas, the sound of the wrecked ship's bell brought a sense of order and familiarity to what would otherwise have been a stateless chaos. Although Somers lost his life in the process, the castaways were able to build two new ships -- the *Patience* and the *Delivery* -- from local cedars and the salvaged rigging from the shipwreck. Gates maintained his government over the whole company for the duration of their stay on the island. On the tenth of May, 1610, the survivors boarded the two new ships, no doubt ringing the bell once more to do so, and set sail for Virginia. [\(27\)](#)

John Smith, an experienced sea captain, described some of the shipboard soundscape for a normal voyage. Perhaps the worst job on board was that of "the *Lyer*," who according to Smith's prescription was "to holde his place but for a week, and hee that is first taken with a lye, every Monday is so proclaimed at the maine Mast by a general cry, *A lyer, a lyer, a lyer.*" In addition to this sonic punishment, the lyer had to clean the outer hull and the beakhead, the latter which served as the privy of a ship. [\(28\)](#) The noise of the jeering combined with the noisome task probably served to keep some semblance of honesty among the sailors. At the end of the day, sailors were supposed pray aloud together from the book of common prayer while their supper cooked, and then after supper, "sing a Psalme, say a Prayer," and go on watch. At midnight each night, the guard changed, the sailors marking the transfer again "with a Psalme and a Prayer." The government of their tongues was crucial to shipboard order. [\(29\)](#)

Musicians were a regular component of the ship's crew, although there is no evidence that any survived to board *Patience* or *Delivery*. Trumpeters were usually thought important enough to garner a quadruple share of the pay, the same as a boatswain, or a surgeon, and almost double that of common sailors. When the leaders of the first Jamestown expedition agreed to a site on which to plant the colony in 1607, they let loose a ritualized fanfare of trumpets as part of the process of legitimating their claim upon the land for colony and king. To take possession of an enemy ship, one had to "sound drums and trumpets and St. George for England" (and of course, win the battle). If an enemy ship was captured, "out goes the boat, they are launched from the ship side, entertaine them with a generall cry, God save the Captaine and all the company with the trumpets sounding." [\(30\)](#)

As the makeshift vessels approached the mainland they weathered another sharp thunderstorm. The next day, in sight of land, they began the critical task of "sounding" the Chesapeake. A sailor would gradually release a weighted line overboard. The rope had knots in it at regular intervals which the sailor counted as they rapidly slipped through his hands into the depths. The key task was for the sailor to "sing fadome" as he did so, letting the others know the depth to which the rope had sunk. When it hit bottom, the line would be hauled in and the process of singing the fathoms, or sounding, would be repeated in order to map a navigable channel. Perhaps among Gates's papers were charts made from the Chesapeake soundings of the first Jamestown voyage, in which considerable time was spent "sounding all the Isles, channels, and inlets thereabouts," finding "severall waies a ship might be brought into this bay." So important was the task of singing the fathoms that Smith put it in verse, to be more easily memorized by any would-be expedition leader:

If in or outward you be bound,
 doe not forget to sound;
 Neglect of that was cause of this
 To steare amisse.⁽³¹⁾

When the supply ships straggled in nine months earlier without the new governor aboard, the "Captaines of the passengers" sought to "usurp the government" of Jamestown. Their method consisted of vocally attacking by "railing and exclaiming against Captaine Smith," the governor. Smith, whether by accident or design, was gravely injured in an explosion shortly after and went back to England, leaving the usurpers, reluctantly presided over by George Percy, in charge. Describing the situation in hindsight, Smith maintained that "there were many in Virginia" who were "meerely projecting, verball, and idle contemmplators." According to Smith, they would "affirm anything to obtain food from the ships, or passage in them, or to give them a name in England by providing wild stories about the state of things in the colony." Clamors, railing, and exclamations were vocal activities that bordered on wildness themselves. They were dangerous sounds, not quite linguistic, on the "rant" of a cultured field. A rant, besides carrying its present meaning in regard to uncontrolled and heated speaking, also referred to the edge of a planted field, where stray plants from the cultured field might spring up, intermixed with the weeds and predators ever threatening to take over the field and choke it. Such half-wild "clamors," Smith concluded, were the chief cause of "those disasters that sprung in Virginia: and our ingenious verbalists were no less a plague to us in Virginia then [sic] the Locusts were to the Egyptians." He maintained that "clamors" were a worse problem than illness, short supplies, or Indian attacks combined, citing his own tenure as governor as an example of a time when the colony suffered under all those things yet lost few settlers and managed even to thrive a bit. The only difference between his tenure and that which followed was the clamors. Smith punished swearing and other speech crimes regularly. In 1608 Wingfield had to pay Smith an exorbitant £200 damages for slander for accusing Smith of intending a mutiny while he (Wingfield) was president. Smith again saw fit to remind readers of the dangers of speech by quoting a verse from Antiphanes:

*For he who scornes and makes but jests of cursings, and his othe,
 He doth contemne, not man but God, nor God, nor man, but both.*⁽³²⁾

The complement to a curse was an oath, as such, oaths were not to be taken lightly. Wingfield refused to let Smith take his oath to be on the council at first, preventing him from being part of the first Jamestown government. Oaths, like swearing and cursing, were ritual enactments of power -- one within social strictures and the other transgressing them. Note that in the poem, Smith is not (as would the Puritans a few decades later) invoking heavenly wrath upon the swearer and oath-breaker, but instead convicting the careless verbalist of indifference. In discussing his experience with settling Jamestown, Smith urged that the colonies be supplied with laborers rather than the "roarers" that the Virginia Company had sent to Jamestown. In addition to being a wave breaking on the shore, a roarer was a riotous bully who made a lot of noise but contributed nothing to the welfare of the colony.⁽³³⁾



Figure 1. Conjectural view of Jamestown, about 1614. The chapel is the largest building in the upper center of the enclosed fort compound. The bells, which the artist has not included, should be at the west end (i.e., the left side) of the chapel. Most of the buildings outside the fort were built after 1610. A small tributary of the James (top) lay a few hundred yards north and east of the settlement which cut off ground access from the mainland except for the slim neck of land at the top left. The whole peninsula was within earshot of the bells rung in the center or guns fired in warning from the periphery. Source: Undated, unsigned, untitled drawing by Sidney E. King for the National Park Service, Colonial National Historic Park, Yorktown VA. Appears in John William Reys, *Tidewater Towns: City Planning in Colonial Virginia and Maryland* (Williamsburg, Va.: Colonial Williamsburg Foundation, [1972]), 42.

After miraculously surviving a set of natural tempests, Gates landed in this civil "tempest of dissension" at the struggling colony of Jamestown. "Much grieved" by the "misery and misgovernment" of the colony, he set about restoring order as soon as his feet hit land. To do so he relied on the settlers' beliefs about sound. "First visiting the church," according to William Strachey, Gates "caused the bell to be rung, at which all such as were able to come forth of their houses repaired to church." Those thus rung in by the bell then heard a prayer after which Gates's commission was read aloud, in fact making him the governor. Gates's first three actions used sound -- bells, preaching, and proclamation -- to ritually reconstruct and redefine Jamestown, setting the people in the proper relation to God, to England, to Virginia's wilderness, and to each other. While the content of that restructuring may have been spelled out in the documents he carried, the act of setting it into motion was done with the chapel bell and the other sounds.

Soon after being sworn in as governor, Gates installed a second bell at the west end of the chapel, perhaps to underscore the new order. The bells were probably outside under a tall protective canopy at first. Bells were often too heavy to place in steeples. The force of them swinging could threaten the structural integrity of a small chapel. Perhaps they were later installed in an attached belfry rather than a steeple, giving the bells and the church a unified appearance but keeping the bells structurally separate from the church.⁽³⁴⁾ The two bells mustered the troops as well as the faithful, and were used when colonists were punished for civil infractions as well as to serve notice to the heavens. Although no mention is made of the bells being used to chase off thunderstorms or the plague, such beliefs were probably not too far removed from Gates's dispelling the 'bad air' that hung over Jamestown.

The bells that made Gates powerful in Virginia did much the same work that church bells in England did during storms: Besides mechanically calling people together, they served notice to the heavens as well, invoking God to return things to their proper order. This process of calling together (or ringing in), invoking the heavens, and then audibly publishing would prevail in Virginia until well into the eighteenth century.

Gates's peal sounded the limits of the colony's civil society. Those limits were influenced to a large degree by what was within earshot. Earshot was an effective measure of the limits of a community for two reasons. First, the colonists heard the peal even if they did not see it. The sound may have brought together a face-to-face public encounter, but this was not necessarily a "face-to-face" society. The latter would have no need of a bell. Second, the sound intruded on their ears involuntarily. The voice of the bell was itself a force, not a declaration or a command. It called those within earshot to it, 'ringing them in.' It did not draw those who wished to attend, but "those who were able." They mustered at its ring. There was no moment of deciding or decoding.

While bells held a particularly rich network of cultural meaning for the Jamestown voyagers, they were by no means the only instruments of sound that played an important role in ordering the society. High

status deaths, whether of people, or the colony itself, were marked by volleys of gunshot and ordnance as well as bells. When Jamestown was briefly abandoned in 1610, Gates "commanded every man at the beating of the drum to repair aboard" the departing ships. They left "about noon, giving a farewell with a peal of small shot" not to what they thought was a lifeless colony, but perhaps to the idea, or the heavens. A few hours later they serendipitously ran into a new supply convoy carrying Lord De La Warre headed for Jamestown so they turned around and went back. When De La Warre arrived, he became governor at the public reading aloud of his commission. He then addressed the company warning them to shape up. Then he administered an oath specially composed for the situation upon the council. It was a combination of the oath of allegiance to the King and an ad hoc oath of "faith, assistance, and secrecy." The following day it was administered to every person in the colony. Thus the whole colony's institutional structure was stitched back together again with ritualized sets of words uttered aloud. In a world where sound was a tangible force and the governor's words sounded the divine power of kings, words were sufficient. No magic was needed. (35)

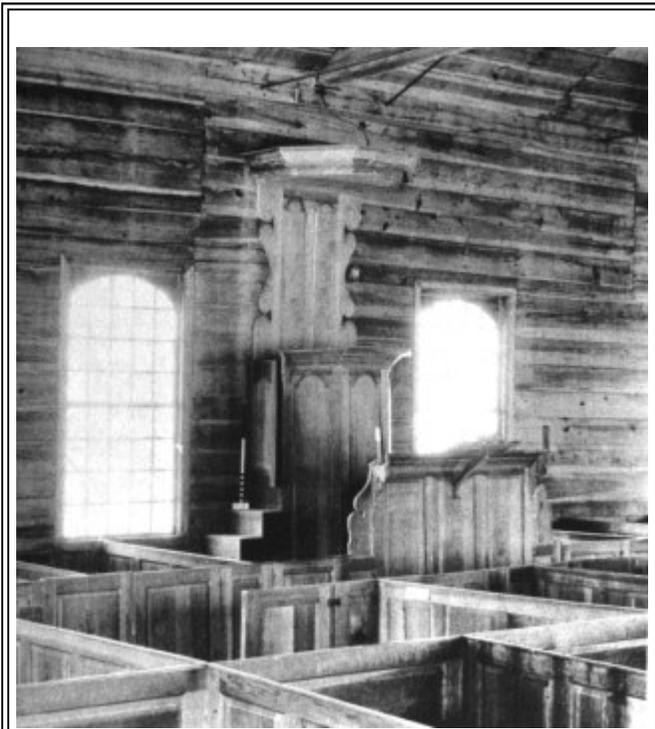


Figure 2. A typical Anglican Chapel from the Eastern Shore of the Chesapeake, built about 1771.

Settlers carefully constructed the soundscape within the chapel at the center of Jamestown's existence. They were particularly proud of their cedar pulpit. Anglican pulpits raised the minister above the crowd, in part to improve visibility, but also to make him easier to hear. Visibility was hampered anyway by the walled seating that was often built to minimize drafts. A sounding board or tester was usually part of the pulpit, either carved out of the same block as the pulpit (probably the case in Jamestown) or suspended overhead. It concentrated and reflected the minister's voice, amplifying it to make him seem louder than an untreated voice. At the bottom of the pulpit would be a man at the "reading desk" who "lined out" psalms and hymns from a book. In a society with few books and somewhere a low literacy rate, lining out allowed the whole congregation to give voice unto the heavens in a carefully controlled fashion. The tunes they sang were all well known, and were often recycled from one hymn to another. There were two or three oft-used meters. The reader would call the tune and the meter, then sing a line, perhaps at

double speed and without the fully articulated melody. The congregation would then follow, singing the line slower and with the melody in place. The interior walls and ceiling of the church would be high and made of an acoustically reflective material to reverberate the sounds of the service. Puritans and Quakers, in contrast, tended to favor lower, less steeply-inclined ceilings, considering reverberation akin to graven images. The service was carefully structured by the Anglican book of common prayer to tie church and state together beneath the king of England and the heavens.⁽³⁶⁾ Crucial to that cohesion and social order were the acoustic design of that environment and the musical knowledge of the congregants.

Sounds were effective: The first generation of English Virginians were pragmatists about the sounds they chose to manipulate. When they could, they used all the sounds above for *doing* things. Sounds could be powerful, and powerful sounds were the ones that interested them. Loud sounds impressed them most. This makes sense when the mechanical theories of acoustics are considered: the louder the sound, the more force behind it, and the more that could be done with it. Bells, gunshot, testers, trumpets, drums: all were ways of making sounds louder, and thus amplifying or extending the range of earshot. One consequence of this soundway was the ability to push the limits of community and civil order beyond face-to-face contact, in direct contradiction to the commonplace ideas about "oral culture." Print also extended these capabilities using the visible world, but in different ways, with different consequences.

Sounds which had no visible sources, such as thunder, were considered portentous for precisely that reason. Never were there sounds that just happened, the way we think of thunder or wind today. If there had to be a will behind all sounds, then an invisible source had to be a spirit of some sort, whether God or devil. In the great chain of being, even if the devil caused the thunder immediately, God was responsible ultimately. So too with human sounds. Obviously, the immediate source behind the ringing of bells was human -- except in the case of earthquakes, where the ringing of bells was portentous indeed. There could be invisible human sources as well. Thus Gates could cause the bell to ring without ever touching it and its peal could assemble the community because it carried not only Gates' will, but the powers of state that descended through the Virginia company's royal charter, which in turn came from the king, whose power came from divine right. All sounds had agents, and the more human the sound, the more agents it was likely to have accrued in being issued, particularly when that sound was an integral part of defining the limits of a civil society where church and state functioned together.⁽³⁷⁾

Shouts, Shots, and Earshot: Conversing with Powhatan

So far we have been considering the colonists as if they were conversing only with themselves and the heavens. Jamestown settlers were very attentive to Native American soundways at first. Their inattention later would cost them severely.

John Smith maintained that the Indians of the Chesapeake worshiped sounds such as thunder, and in particular, the report of the colonists' guns.⁽³⁸⁾ Perhaps they had a concept similar to *manitou*, which Roger Williams translated as "it is excellent," but which others translated as "it is a god."⁽³⁹⁾ Either way, Smith made the most of the belief. At the Tockwough River, he gained Indian allies by "firing 2 or 3 rackets [rockets]" over the river. Thereafter, he claimed, they "supposed nothing impossible wee attempted."⁽⁴⁰⁾ When the colonists crowned Powhatan as a vassal of the king, the colony's boats fired off such a huge "volley of shot that the king start up in horrible feare" for a moment before regaining his composure.⁽⁴¹⁾



Figure 3. Listening post from DeBry's engraving, based on Whites's painting, below

On more than one occasion, the sound of guns was enough to repel an attack.⁽⁴²⁾ While exploring the upper Chesapeake, Smith and his small company were ambushed by over a hundred Potomac Indians. The colonists responded with gunfire, but not to hit anyone: "the grazing of the bullets upon the river, with the ecco of the woods[,] so amazed them" that they threw down their bows and arrows and, exchanging hostages as a gesture of good faith, went to the Potomac's town, where they were treated well.⁽⁴³⁾ Other times, Smith announced his entrance to an Indian town by firing several shots in the air, claiming it insured his safety.⁽⁴⁴⁾ Perhaps as much as scaring the Indians, he was reassuring himself, clearing the air of whatever demons possessed them.

The response was not one simply of fear, though. When Smith went to barter with one group Indians for food, they asked as part of the bargain to hear the party's guns. Smith and company fired them off in a riverbed, "which in regard of the eccho seemed a peale of ordnance." Smith knew it was the sound that impressed them as well as the bullets, so he maximized the effect.⁽⁴⁵⁾ Many Chesapeake area natives trimmed their clothes with shells and snake rattles to "make a

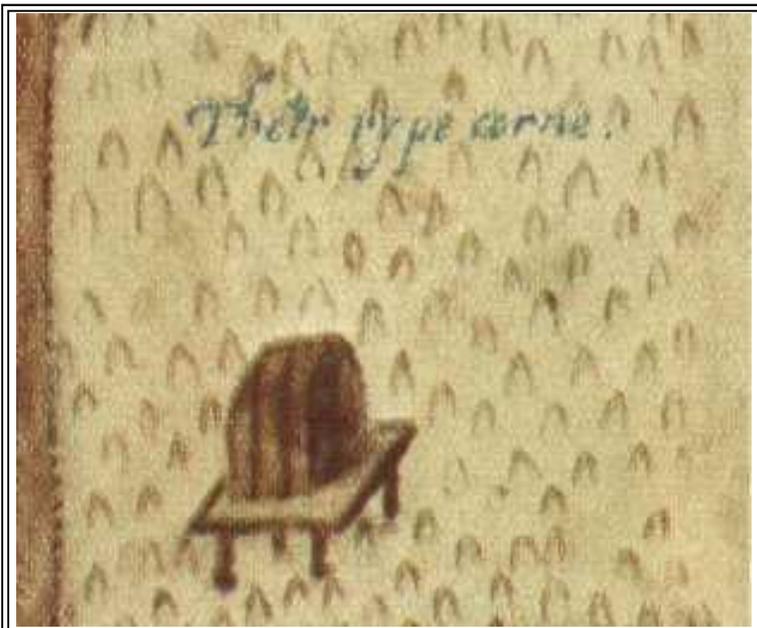


Figure 4. White's Secota Indian drawings. A listening post on the edge of a cornfield surrounded by woods, c. 1585.

Certayne murmuring or whistling noyse by gatheringe the wind, in which they seeme to take great jollety, and [they] hold that a kind of bravery"⁽⁴⁶⁾ Special scaffolds were designed for sitting and holding conversations, and in the fields there were listening posts which reflected and amplified sounds.⁽⁴⁷⁾

The Indians often enjoyed and sought out unfamiliar sounds. In the controversial passage of Smith's *Generall Historie* in which the young daughter of Powhatan, Pocahantas, prevented Smith's execution, Powhatan was supposedly "contented" that Smith should be spared to make hatchets for him and "bells,

beads, and copper" for Pocahontas.⁽⁴⁸⁾ Smith mentions another instance where he gave a few bells to Indians whose labors would have cost him a horse in England.⁽⁴⁹⁾ Once, the food obtained in exchange for bells may have kept the colony alive. It is easy to mark this as foolishness on the part of Native Americans, but it was the desire for new and unfamiliar sounds, perhaps not completely unrelated to what drove the colonists.

Guns were not the only sound to strike respect and apprehension in Chesapeake Indians. "Wee might to this daye," argued Smith "have wrought more amongst them by the Beating of a Drumme, that [than?] now wee can by the fieringe of a Canon"⁽⁵⁰⁾ Powhatan's people, for example, were a bit edgy from the coming of the Europeans. Strachey wrote that "straunge whispers (indeed) and secrett[s] at this hower run among these people and possess them with amazement....every newes and blast of rumour strykes them....the noyses of our drumms of our shrill Trumpets and great Ordinance terrefyes them so as they startle at the Report of them, how soever far from the reach of daunger."⁽⁵¹⁾ Having gone out on another food-bartering expedition, Smith, Captain Newport and Master Scrivener left their boat and marched toward the King with one of them blasting a trumpet for effect. Smith apparently greatly impressed Powhatan with descriptions of European wars with trumpets and drums. At another juncture when things were tense between the two leaders, Smith told Powhatan that the Indians will know when the English are going to fight because they will sound their "drums and trumpets."⁽⁵²⁾

The Indians were not the only ones to rely on the sound of the guns. Once while men were planting corn and cutting down trees outside the safety of the fort, they heard an alarm from the village, probably rung on the bells or made by gunshot. Thinking this warning from the center was an Indian attack, they were relieved to discover it was a long-overdue supply ship.⁽⁵³⁾ Smith was captured by Opechancanough while split from the rest of his party. The other two colonists were supposed to fire their guns off at the first sign of Indians to warn him. Hearing "a loud cry and a halloing of Indians, but no warning peece," Smith knew he was in trouble and that his companions were captured or dead. Once he was surrounded, he fired his gun a few times, the sound of which kept them back, but ultimately he was surrounded by hundreds of Pamunkeys, and when he slipped in some mud, he surrendered his guns.⁽⁵⁴⁾

The colonists carefully noticed the sounds that Native Americans made. The colonists created a sonic other that was nonetheless familiar to them. Native Americans were all possessed by the devil, it seems, or so wild as to sometimes appear to have no language. Smith described the paralanguage of the Iroquoian-speaking Sasquesahanocks as otherworldly, "sounding from them, as it were a great voice in a vault, or cave, as an Eccho."⁽⁵⁵⁾ In contrast, he described their neighbors the the Potomacs, as "showting, yelling, and crying, as we rather supposed them to be so many divels."⁽⁵⁶⁾ Comparisons of Native American Singing, speaking, and non-verbal vocalizations were often associated with the devil, as if Native Americans were all possessed, suffereing from "heathenicity" rather than ethnicity. George Percy thought that Powhatan's people made "a noise like so many Wolues or Deuils." He described their formal speeches as a "foule noise" and said that in worshipping the sun they made a "Hellish noise foaming at the mouth."⁽⁵⁷⁾

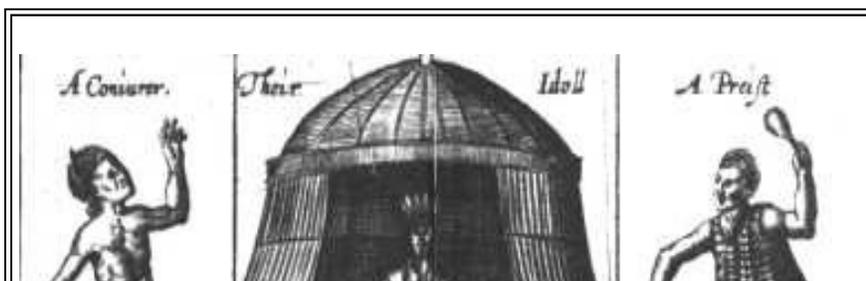


Figure 5. Scanned from John Smith's *Generall Historie in Barbour*, ed., *Complete Works*, 2: 98. Vaughan inserted Smith into remakes of the DeBry engravings.

Even without directly constructing Native Americans as diabolical, the colonists often put them sonically beyond the pale, where rather than speaking or singing, they were described as howling or shouting. Healing was often associated with howling. The Pamunkey method of healing included "a Rattle and extreame howling, showing, singing."⁽⁵⁸⁾ When Wowincopunck, the wereowance of Paspahagh, was killed in battle with the colonists, the other warriors retrieved his body and carried it off "with a horrible yell and howling."⁽⁵⁹⁾

Native American women in the Chesapeake region were often noted for their non-verbal vocalizations. At deaths, women painted their faces black to mourn and go "lamenting by turnes with such yelling and howling, as may express their great passions"⁽⁶⁰⁾

Strachey thought they had a "delightful and pleasant tang in their voyces" when they sang,⁽⁶¹⁾ but Smith differed in his opinion, describing the same singing as an "excellent ill varietie" of the "most hellish cries, and shouts," every bit as hellish and terrifying as that of the men.⁽⁶²⁾ In contrast, The dance of the men was little more than "showting, howling and stamping their feet" in Strachey's estimation.⁽⁶³⁾

Even in the dehumanizing descriptions of "howling" and "screeching," we can begin to discern the outlines of more complex Native American soundways. Chesapeake Indians placed as much importance on the sounds associated with warfare as did the Europeans. Before fighting, Powhatan's warriors would prepare themselves with loud percussive music and singing:

For their warres they have a great deepe platter of wood. They cover the mouth thereof with a skin, at each corner they tie a walnut, which meeting on the backside neere the bottome, with a small rope they twitch them together till it be so tought and stiffe, that they may beat upon it as upon a drumme. But their chief instruments are Rattels [sic] made of small gourds or Pumpion shels. Of these they have Basse, Tenor, Countertenor, Meane, and Tribble. These mingled with their voices sometimes 20 or 30 together, make such a terrible noise as would affright then delight any man.⁽⁶⁴⁾

The songs could be about their foes, as in the "kynd of angry song" that was sung about the colonists in "homely rymes" that concluded with "a kynd of Petition unto their Okeus, and to all the host of their Idolls, to plague the Tassantasses (for so they call us) and their posterityes."⁽⁶⁵⁾

In the actual fighting, the Powhatans and their neighbors used "their accustomed tune which they use only in warres." This sounded to Smith like "horrible shouts and screeches , as though so many infernal helhounds could not have made them more horrible."⁽⁶⁶⁾

While the description is not esthetically pleasing, Smith was no doubt taken by it. He tried to outdo the Indians by expressing the awful din of European wars to Powhatan, noting that the King was duly impressed.⁽⁶⁷⁾

The torture and beatings of prisoners was widespread. The soundways around this practice were remarkably similar among the among the Native American nations, in part because warfare and captive-taking is and was an important form of cross-cultural contact and sharing, albeit an unpleasant one. Smith seems to have been a special case. While he was captive, seven men began singing around the fire

and playing rattles. They laid down a little grain at the end of each song, with the leader giving a short talk. The orator was a "great grim fellow" and he led the other six with a "hellish voyce and a rattle in his hand." In some ways Smith was being treated more like a high-status visitor than a prisoner. Important visitors would be seated on a mat and a great tuneful shout would be raised to greet them, followed by an oration. The "howling devotions" made by these "devils" went on for about seven hours for three days in a row, though⁽⁶⁸⁾

At least part of its intent was to unnerve apparently unflappable Smith.

Silence on his part would have been appropriate. When Powhatan ordered a criminal severely beaten for some offense, the criminal made no sound at all. Strachey remarked that "they never bemoane themselves, nor cry out, giving up so much as a groane for any death how cruell soever and full of Torment."⁽⁶⁹⁾ To cry out in pain was to be broken. It was a great victory for the torturers. The "breaking" of captives, either physically, sonically, or both, was an important part of warfare from Canada to Florida, and from the East coast to the Great Lakes and the Mississippi in the West. "Unbroken" behavior would be to receive the torture in silence, or to respond with mocking and insults thrown back at the torturers, or one's own song, the voice never cracking or modulating in response to the various pains inflicted by the captors. Suffering this way was respected, and occasionally it might result in adoption into one of the captor's families rather than death. The sounds one made or did not make under duress were core markers of identity for Native Americans, whether the captive survived them or not.⁽⁷⁰⁾

The Jamestown colonists were abject failures in this department. They "broke" immediately even at the prospect of torture. The Indians made a "scornefull song" about them at the falls of the James River after "they killed Capt. William West our Lord Generalls nephew, and 2 or 3 more, and tooke one Symon Score a saylor and one Cob a boy prisoners." The refrain of the song went:

Whe, whe, yah, ha, ha, ne, he, wittowa, wittowa.

It derided the colonists for immediately crying out "Whe, whe" upon being tortured or even seeing torture, which according to Strachey, "they mock't us for and cryed agayne to us Yah, ha ha, Tewittaw, Tewittawa, Tewittawa"⁽⁷¹⁾

Security also depended on sounds that were not necessarily linguistic. Powhatan had about forty or fifty sentinels who "at every half howre...doth hollow, unto whome every Sentinell returns answere, rownd from his stand, if any faile, an officer is presently sent forth, that beateth him extreamely. These guards were keenly alert to any sounds in the night, and would give a cry of alarm not unlike that employed by the colonists at any unusual noise."⁽⁷²⁾

Sounds, which cross cultural, social, and political boundaries with impunity, served to ratify important agreements among the nations around the Chesapeake and with the colonists. Powhatan brought the neighboring Chickahomines into alliance with the colonists. At the conclusion of negotiations, the agreement was sealed not with a document, but with a speech from each side. Thomas Dale and Captain Argall went into counsel with the Chickahomines, and when it was repeated publicly (published, in the older sense of the word) the Powhatan and Chickahominy warriors let out "a general assent and a great shout to confirme it."⁽⁷³⁾ This was a more powerful bond in colonial Virginia than a signature on a document. When the captive Smith, who for all intents and purposes was treated as a leader of the colonists, was brought before Powhatan "all the people gave a great shout."⁽⁷⁴⁾

Indians in the Chesapeake region valued what they considered to be great or novel sounds in this political process. Political comings, goings, agreements, and wars were all publicly marked with great sounds. Upon departing from a particularly friendly diplomatic foray to the Indians on the eastern shore of the Chesapeake, the colonists -- at the parting request of their hosts -- fired off a loud volley of gunfire which the Indians responded to with a loud shout.⁽⁷⁵⁾ This exchange of sounds was a demonstration of political power and identity, mutually understood across barriers of language and culture. The terms of the exchange were set as much by the Indians as the colonists, and heard by both through soundways quite different than our own, but comprehensible once we are willing to attend sonic documentary evidence without donning the blinders of a preconceived notion of "oral culture."

The colonists' lives depended on properly understanding their new soundscapes. Strachey that alarms traveled up the James river faster than the colonists ever could. Their comings and goings were known in advance by the Indians.⁽⁷⁶⁾ Communication networks along the shoreline were well established and quick. Smith, not content to observe, tested the speed of the network by spreading false rumors to Indians near Jamestown and then traveling upriver, where he would hear the same rumor repeated.⁽⁷⁷⁾ The idea of a communication network would have been odd to the colonists in this time before the advent of media that could travel faster than human messengers. Smith and Strachey spoke of the spread of rumors and knowledge. To them a "communication" would have referred to the system of waterways on which they travelled. The idea of communicating disembodied ideas would have seemed irrational, religious, or -- outside the context of church and prayer -- superstitious or even diabolical. The network could not operate without the speakers traveling through it. Even books and letters, those wonders of silent speech, had to be delivered by a messenger.

The colonists were lulled into a belief that all was well and began to let down their guard in the second decade of settlement. They gradually drifted apart to start small plantations out of earshot from one another, further encroaching on Indian lands. Powhatan died and Opechancanough, who disliked the colonists, took over as leader. On March 22, 1622 Opechancanough put the Indian communication Network into action in full force. The Indians attacked the widely scattered settlements "at one instant," even they plantations "one hundred and fortie miles up on [the James] River on both sides." Smith found it particularly remarkable that even though the Indian settlements were as small and scattered as the English ones, the Indians were able to act in concert. The Indians killed some 347 colonists that day, nearly a third of the English population. Although the argument is implicit rather than explicit, the Indians had communication networks that the colonists admired but did not understand. Smith was unable to explain how the widely scattered Indians had been in such good communication when they were not physically together. The colonists responded by ringing in their settlements. Twenty five of the Virginia settlements were ordered abandoned, and the settlers moved into the remaining six. Lacking the Native American's skills at communicating effectively over a scattered area, the colonists returned to within earshot of their fellows for safety. The era of intercultural communication was over -- much too late by Smith's estimate -- and the massacre was used as legitimation for ceasing general communications with the Indians and seeking to remove them from the Chesapeake altogether by whatever means were available.⁽⁷⁸⁾

Conclusion

Jamestown's earliest settlers were bound together as a society by their soundscapes. Rung in by bells, never safely living beyond the earshot -- no matter how well extended by guns, trumpets, shouts, and bells -- of their fellow colonists. They considered these sounds to be effective forces in their worlds. They did not simply choose to believe in powerful sounds, they had no other set of beliefs by which to live. Even the sounds of nature that we now attribute to purely agentless causes ere thought to be both powerful and communicative. Just as bells and guns warned those in danger to come back to the center,

so thunder warned the godly to close ranks. The world teemed with invisible forces, some of which could nonetheless be heard. Powerful sounds could be used to oppose them, or clear them away as in the case of clearing the air with guns and bells. Considered in such a soundscape, the importance of speech to the Jamestown colonists becomes obvious. The sounds made by powerful men were themselves powerful and had real effects.

Colonists carefully explored not only the visible landscapes of Native Americans, but their soundscapes as well. They experimented with the use of various sounds as markers of power and identity in their relations with Native Americans, often undertaking behaviors driven by Native American soundways as much as their own. Treaties, rather than existing in the authority of signed documents, were governed by and mandated by loud public vocalizations and speeches. This would continue through the eighteenth century, with the colonists growing less careful of strictures on how treaties were to sound as Native Americans lost power in the East. Often, as in the case of Powhatan's communication networks, the English had no sonic frame of reference on which to hang what they observed. They simply did not understand how information traveled faster than they could move. This misunderstanding of Native American sonic power had tragic short term consequences in the "massacre" of 1622.

Soundways like those outlined above would continue to play powerful role in colonial life during the seventeenth and eighteenth centuries, but they were not static. Native Americans were increasingly marginalized. Enslaved West Africans would bring other sets of soundways to the Chesapeake in ever greater numbers. Just about the same time as they began outnumbering English indentured servants in the workforce, the soundscapes of the Chesapeake, black and white, underwent tremendous changes. Planters misunderstood the meaning of music in African American life, sometimes with interesting consequences for both the free and the enslaved. Bells continued to be important as social glue, but of another sort than described above. They were increasingly used to regulate the workday of forced laborers and to rationalize time in new ways more recognizable to us today.⁽⁷⁹⁾ As literacy and print spread and increased, visual culture began to encroach upon the audible world's importance, slowly changing the soundscapes of early Americans to territory more familiar to us.

Rhys Isaac has argued that elites in later colonial Virginia were "talking books."⁽⁸⁰⁾ In one sense that is true. The metaphor helps modern readers get their minds around the importance that colonists invested in the speech acts of elites. But why not a "ringing book"? A "shooting book?" Or in the case of dangerous ideas put forth by others, a "hellishly howling, screeching book?" Considered from the perspective of the colonists, the metaphor of an elite as talking book might be altogether incomprehensible, even in regard to speech. The concept would be as absurd to them as to us. If they were able to hold such a conversation with the present as historians attempt to hold with the past, then they might say that a book in the early twenty-first century is a sort of "silent elite," robbed of the power of sound, but somehow, perhaps magically, invested with the authority they invested in all the sonic acts of colonial elites, not just speech.

NOTES

1. John Smith, *The Generall History of Virginia, New England, and the Summer Isles (1624)*, in Barbour, ed., *Complete Works*, 2: 221.

2. Louis Wright, ed., *A Voyage to Virginia in 1609* (Charlottesville: University Press of Virginia, 1964), xx-xxvi; Philip L. Barbour, ed., *The Jamestown Voyages Under the First Charter, 1606-1609*, Works Issued by the Hakluyt Society, 2nd series, no. 136, 2 vols. (London: Hakluyt Society, 1969), 2: 249-53;

Philip L. Barbour, ed., *The Complete Works of Captain John Smith (1580-1631)*, 3 vols. (Chapel Hill: University of North Carolina Press for the Institute of Early American History and Culture, 1986) 1: 121-130.

3. Gabriel Archer to an unknown friend, Virginia, August 31, 1609, Barbour, ed., *Jamestown Voyages*, 2: 281; William Strachey, *A True Reportory of the Wreck and Redemption of Sir Thomas Gates, Knight, upon and from the Islands of Bermudas*, in Wright, ed., *Voyage to Virginia in 1609*, 4 (my italics).

4. Strachey, *True Reportory*, 4, 5.

5. Strachey, *True Reportory*, 6. This is the only place women are heard from in *True Reportory*, and they "clamor" rather than speak. The lack of language in their vocalizations may be a sign that they were possessed, in this case rightfully (by the terms of the time) by husbands, fathers, or masters. This issue is taken up more fully in my dissertation, "Early American Soundways, 1600-1800," forthcoming.

6. Strachey, *True Reportory*, 4; John Smith, *An Accidence or the Pathway to Experience (1626)*, in Barbour, ed., *Complete Works*, 3: 21; and John Smith, *A Sea Grammar (1627)*, in Barbour, ed., *Complete Works*, 3: 92; Archer to friend, 2: 281. On signals as the Admiral speaking, see Anonymous, "Day, Night, and Fog Signals Decoded: A Book used in the Royal Navy at the Time of the Command of Admiral Sir Edward Boscawen," MS, John Carter Brown Library, Codex Eng 32, c. 1747, 12 verso, 18 recto, 23 verso; Smith, *Accidence*, 3: 23; and Smith, *Sea Grammar*, 3: 103. Eighteenth century signal books are much more visual in their emphasis. Compare "Day, Night, and Fog Signals" and Nicholas Charrington, "Signals to be Observed in Sailing and Fighting by his Majesty's Squadron on the Leeward Island Station," MS, John Carter Brown Library, Codex Eng 72, 1778 with Smith's accounts of signaling cited above.

7. Strachey, *True Reportory*, 95-96; John More to William Trumbull, London, November 9, 1609, Barbour, ed., *Jamestown Voyages*, 2: 285.

8. Partial exceptions include Alain Corbin, *Village Bells: Sound and Meaning in the Nineteenth-Century French Countryside*, trans. Thom, Martin (New York: Columbia University Press, 1998); Jane Neill Kamensky, *Governing the Tongue: The Politics of Speech in Early New England* (Oxford: Oxford University Press, 1998); Robert Blair St. George, "'Heated' Speech and Literacy in Seventeenth-Century New England," in *Seventeenth-Century New England*, ed. David G. Allen and David D. Hall (Boston: University Press of Virginia for the Colonial Society of Massachusetts, 1985), 275-322; Bruce R. Smith, *The Acoustic World of Early Modern England: Attending to the O-factor* (Chicago: University of Chicago Press, 1999).

9. See Rath, "Early American Soundways" for the details concerning the approaches sketched here. In the dissertation, issues of methodology, significance, and theory are each taken up in depth separately, so the interested reader is referred there for the relevant citations.

10. For the first Jamestown voyage see George Percy, "Observations Gathered out of a Discourse of the Plantation of the Southerne Colonie in Virginia by the English, 1606," in Barbour, ed., *Jamestown Voyages*, 1: 133. Raleigh is quoted in Charles Norman, *The Discoverers of America* (New York: Thomas Y. Cresswell Co., 1968), 165. For other storms during the age of discovery, though with no discussion of their sounds, see David McWilliams Ludlum, *Early American Hurricanes 1492-1870* (Boston: American Meteorological Society, 1963), 1-10.

11. Simon Harward, *A Discourse of Lightnings* (1607; Amsterdam and New York: De Capo Press and

Theatrum Orbis Terrarum, 1971).

12. Harward, *Discourse of Lightnings*, sig. C3r. On bells and other instruments of sound dispelling thunderstorms, see chapter two. Concerning the sources of the "exhalations," The Jesuit missionary Jacques Marquette wrote that "Noisome vapors arise Constantly arise" from the "mud and mire;" of Green Bay, thus "Causing the loudest and most continual Thunder that I have ever heard." *JR*, 59: 99. Claude Allouez, confirmed Marquette's observation, claiming that Green Bay was a great swamp that gave rise to "loud and frequent Peals of thunder." *JR*, 60:161.

13. Strachey, *True Reportory*, 99-100; Strachey, *Historie of Travell into Virginia*; Sylvester Jourdain, *A Discovery of the Bermudas, Otherwise Called the Isle of Devils (1610)*, in Wright, ed., *Voyage to Virginia in 1609*, 1-102. For speculation on the identity of female addressee of Strachey's letter, see Louis Wright, Introduction to *Voyage to Virginia in 1609*, x-xi.

14. Harward, *Discourse of Lightnings* sig. C3r-v.

15. Harward, *Discourse of Lightnings*, sig. C2v. Biblical citations given as Psalms 77:17, Psalms 18:13, and Job 38:25.

16. Harward, *Discourse of Lightnings*, sig. B1r-B2r.

17. The islands' reputation may have stemmed in part from Indian beliefs, for the Bermudas were some of the only uninhabited islands in the Caribbean at the time of the first European contacts. Early voyagers may have learned that the Bermudas were uninhabitable "devil's isles" from the indigenous avoidance of them.

18. Strachey, *True Reportory*, 20.

19. Harward, *Discourse of Lightnings*, sig. A1r, B1v-B2r; Simon Schama, *Landscape and Memory* (New York: Knopf, 1995), 6-7; Keith Thomas, *Religion and the Decline of Magic: Studies in Popular Beliefs in Sixteenth and Seventeenth-Century England* (New York: Scribner's, 1971), 31-32, 49, 52-53, 57-58, 73-74;

20. Harward, *Discourse of Lightnings*, B2r. The priest would actually say the benediction in Latin (the translation is Harward's):

Omnipotens semiterne Deus tu hoc tintinnabulum coelestis benedictione persunde ut ante sonitum eius longius effugentur ignita iacula inimici, percussio fulminum, impetus lapidum, laesio tempestatum.

The italics in both the Latin and the translation are Hayward's.

21. Hayward, *Discourse of Lightnings*, sig. C3r.

22. The hogs were probably left by the Spanish or Portuguese years earlier. See Alfred W. Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, Conn.: Greenwood Press, 1977) 77-79. For a detailed description of the Bermudian food chain, see Strachey, *True Reportory*, 22-34. Sound played a role in keeping the castaways fed. Strachey reports that they caught great numbers of seabirds on the islands by "lowbelling," an old English technique in which the hunters went out at night with torches and used a bell to drive confused birds from their roosts into the hunters' nets. Strachey claimed that in an hour they once caught three hundred "cahows" this way: see *Ibid.*, 30-

31. The cahow was named for its "strange hollo and harsh howling." Later, the accidental Bermudians discovered a daylight means of capturing the birds with vocal sounds instead of bells,

which was by standing on the rocks or sands by the seaside and holloing, laughing, and making the strangest outcry that they possibly could. With the noise thereof the birds would come flocking to that place and settle on the very arms and head of him that so cried, and still creep nearer and nearer, answering the noise themselves; by which our men would weigh them by the hand, and which weighed heaviest they took for the best and let the others alone.

Cahows are now extinct. See *Ibid*, 31.

23. Strachey, *True Reportory*, 53.

24. Richard Allestree, *The Whole Duty of Man* (Williamsburg: W. Parks, 1746), 124; Rath, "Early American Soundways."

25. Strachey, *True Reportory*, 40-45.

26. Strachey, *True Reportory*, 43-44, 45, 48, 52. The Bermuda apologies are congruent with the role of apologies in seventeenth-century New England. See Jane Neill Kamensky, *Governing the Tongue: The Politics of Speech in Early New England* (Oxford: Oxford University Press, 1998).

27. Strachey, *True Reportory*, 63, 96.

28. Smith, *Accidence*, in *Complete Works*, 3: 17. The same material appears worded slightly differently in Smith, *Sea Grammar*, in *Complete Works*, 3: 84. For the parts of the ship the lyeer was to clean, see Smith, *Sea Grammar*, in *Complete Works*, 3: 60, 71.

29. Smith, *Sea Grammar*, in *Complete Works*, 3, 86. The idea of governing the tongue is from Jane Neill Kamensky, *Governing the Tongue: The Politics of Speech in Early New England* (Oxford: Oxford University Press, 1998).

30. Strachey, *True Reportory*, 76, 78, 80; Smith, *Accidence*, 2: 23, 26-27; Smith, *Sea Grammar*, 2: 83, 102-103, 126-127; Percy, "Observations," 1: 144. Smith wrote:

The Trumpeter is always to attend the captains command, and to sound either at his going ashore or comming aboard, at the entertainment of strangers, also when you hale a ship, when you charge board or enter; and the poope is his place to stand or sit upon, if there be a noise they are to attend to him, if there be not every one he doth teach to beare a part the Captaine is to encourage him, by increasing his shares, or pay and give the master Trumpeter a reward."

Pay for trumpeters estimated from the following rates taken from Smith, all in shares of total profit:

	<i>Accidence</i>	<i>Sea Grammar</i>
Captain	9 shares	9-10 shares
Lieutenant	neg. w/ Capt.	9 or neg. w/ Capt.
Master	7	7-8
Mates	5	5-6

Gunners	5	5-6
Botswain	4	5-6
Marshall	4	5-6 ¹
Carpenter	5	5-6
Trumpeter	4	5-6
Quartermasters	4	4-5
Cooper	--	4-5
Chir.'s mate	--	4-5
Gunner's Mate	--	4-5
Carp.'s Mate	--	4-5
Corporal	3	3-4
Quarter Gunners	--	3-4
Chirurgion	3	3-6
Trump.'s Mate	--	3½-4 ²
Steward	3	3-4
Cook	3	3-4
Coxswaine	3	3-4
Swabber	--	3-4
Sailors ³	1½-2	½-3
Boys	1	1-1½

¹ "On English ships they seldom use any Marshall, whose shares amongst the French are equall with the Botswaines" wrote Smith. The marshall was usually found on French ships and was responsible for carrying out punishments.

² "4" mistakenly printed as "3."

³ Called "Younkers" in *Sea Grammar*

Adapted from Smith, *Sea Grammar*, 2: 110-11 and Smith, *Accidence*, 2: 26-27.

31. Smith, *Sea Grammar*, 3: 90, Smith, *Generall History*, 2: 106, John Smith, "The Sea Marke," in *Advertisements for the Unexperienced Planters of New England, or Any Where (1631)*, in Barbour, ed., *Complete Works*, 3: 265.

32. Smith, *Generall History*, 2: 129; Smith, *Proceedings*, in *Complete Works*, 1: 238 (swearing); Edward Maria Wingfield, "Discourse (1608)", in Barbour, ed., *Jamestown Voyages*, 1: 223. See Smith, *Generall History*, 2: 139n2 for Barbour's explanation of the details. Smith, *Generall History*, 2: 185n2, and 193n5 for Barbour's tracking of the source -- it is Barbour quoting Smith quoting Fotherby quoting Joannes Stobaeus quoting Antiphanes. Italics in original. For rant, see Rath, "Early American Soundways" and OED 2nd ed., s.v. "rant.."

33. Smith, "Advertisements for the Unexperienced Planters of New England," 3: 273. Also see William

Shakespeare, *The Tempest*, Act 1, Scene 1, line 17. In the scene, the botswaine is trying to direct the crew in a storm (perhaps based upon Strachey's account), while the gentlemen are trying to interrupt him in the name of the king (conveniently on board in the play). The botswaine yells at them (and puns to the audience), "What care these roarers for the name of the king."

34. Henry Chandlee Forman, *Virginia Architecture in the Seventeenth Century* (Williamsburg: Virginia 350th Anniversary Celebration Committee Corporation, 1957), 51-52.

35. Strachey, *True Reportory*, 76.

36. Strachey, *Historie of Travell into Virginia*, 80 [pulpit]; Rhys Isaac, "Books and the Social Anthropology of Learning: The Case of Mid-Eighteenth-Century Virginia" in William L. Joyce et al., eds., *Printing and Society in Early America* (Worcester: American Antiquarian Society, 1983), 231-241, 249; David Cressy, *Bonfires and Bells: National Memory and the Protestant Calendar in Elizabethan and Stuart England*, (Berkeley: University of California Press, 1989), 194 for Jamestown and passim for bells.

37. For more evidence and discussion of these claims, see Rath, "Early American Soundways." For "will and "desire" as effective forces in seventeenth century Anglo-American culture, see Richard Cullen Rath, "'What Meanes Hee May for to Gett Her Over:' The Transference of Language and Culture from Old to New England in the Seventeenth Century" (Honors Thesis, Millersville University, Penn., 1991), 72-73.

38. Smith, *Generall Historie*, in *Complete Works*, 2: 122.

39. Roger Williams, *A Key into the Language of America* (London: Gregory Dexter, 1643), 190-91, cited in Neal Salisbury, *Manitou and Providence: Indians, Europeans, and the Making of New England, 1500-1643* (New York: Oxford University Press, 1984), 37. See also Salisbury, *ibid.*, 37-39. The terms *Okeus* and *Manitec*, Perhaps corresponding to the Iroquoian *Oki* and Algonkian *Manitou* appear in the writings of both Smith and Strachey, indicating that the correspondence was more than a chance resemblance.

40. Smith, *Proceedings*, in *Complete Works*, 1: 230, (also in *Generall Historie*, 2: 170).

41. Smith, *Proceedings*, in *Complete Works*, 1: 237, (also in *Generall Historie*, 2: 184).

42. Smith, *True Relation*, in *Complete Works*, 1: 31.

43. Smith, *Proceedings*, in *Complete Works*, 1: 227 (another version appears in *Generall Historie*, in *Complete Works*, 2: 166)

44. Smith, *True Relation*, in *Complete Works*, 1: 37.

45. Smith, *True Relation*, in *Complete Works*, 1: 41.

46. Strachey, *Historie of Travell into Virginia* in *Jamestown Voyages*, 74.

47. Strachey, *Historie of Travell into Virginia* in *Jamestown Voyages*, 78; Henry Chandlee Forman, *Virginia Architecture in the Seventeenth Century* (Williamsburg: Virginia 350th Anniversary Celebration Committee Corporation, 1957)8, 13, 14.

48. Smith, *Generall Historie* in *Complete Works* 2: 151 (also compared with others in 1: 14).
49. Smith, *True Relation*, in *Complete Works*, 1: 73.
50. Smith, "Fragment G." [1623?] in *Complete Works*, 3:325. Insertion made by editor.
51. William Strachey, *The Historie of Travell into Virginia Britania (1612)*, Works Issued by the Hakluyt Society (London: Hakluyt Society, 1953), series 2, vol 103: 105.
52. Smith, *True Relation*, in *Complete Works*, 1: 57, 69, Smith *Generall Historie*, in *Complete Works*, 2: 245.
53. Smith, *True Relation*, in *Complete Works*, 1: 83.
54. Smith, *True Relation*, in *Complete Works*, 1: 45.
55. Smith, *Map of Virginia*, in *Complete Works*, 1: 149.
56. Smith, *Proceedings*, in *Complete Works*, 1: 227 (another version appears in *Generall Historie*, in *Complete Works*, 2: 166).
57. George Percy, "'Observations Gathered out of a Discourse of the Plantation of the Southerne Colonie in Virginia by the English, 1606'", in Barbour, ed., *Jamestown Voyages*, (1969), 2: 136, 143.
58. Smith, *True Relation*, in *Complete Works*, 1: 59.
59. Strachey, *Historie of Travell into Virginia*, 67
60. Strachey, *Historie of Travell into Virginia*, 95.
61. Strachey, *Historie of Travell into Virginia*, 71.
62. Smith, *Proceedings*, in *Complete Works*, 1: 236, (also in *Generall Historie*, 2: 183).
63. Strachey, *Historie of Travell into Virginia*, 87.
64. Smith, *Map of Virginia*, in *Complete Works*, 1: 167; also see Smith, *Generall Historie*, 2: 120 for different version.
65. Strachey, *Historie of Travell into Virginia*, 85.
66. Smith, *Map of Virginia*, in *Complete Works*, 1: 167; also see Smith, *Generall Historie*, 2: 120 for different version.
67. Smith, *True Relation*, in *Complete Works*, 1: 57, 69, Smith *Generall Historie*, in *Complete Works*, 2: 245.
68. Smith, *True Relation*, in *Complete Works*, 1:59. Compared at length with similar passage by Philip Barbour, ed. In introduction to Smith, *Complete Works*, 1:11-12 . Also see Strachey, *Historie of Travell into Virginia*, 96-97.

69. Strachey, *Historie of Travell into Virginia*, 61, 86.

70. Details of singing and silence during torture in other parts of seventeenth and eighteenth century Native America are developed fully in my dissertation, "Early American Soundways," forthcoming..

71. Strachey, *Historie of Travell into Virginia*, 85-86. The whole song and Strachey's gloss of it, is included here:

Mattanerew shashashewaw crawango pehecoma
 Whe Tassantassa inoshashaw yehockan pocosack
 Whe, whe, yah, ha, ha, ne, he, wittowa, wittowa.

Mattanerew shashashewaw, erawango pehecoma
 Capt. Newport inoshashaw neir in hoc nantion matassan
 Whe whe, yah, ha, ha, etc.

Mattanerew shashashewaw erowango pehecoma [end page 84, start 85]
 Thom. Newport inoshashaw neir in hoc nantion monocock
 Whe whe etc.

Mattanerew shushashewaw erowango pehecoma
 Pockin Simon moshasha mingon nantian Tamahuck.
 Whe whe, etc.

Which may signifie how that they killed vs for all our Poccasacks, that is our Guns, and for all Capt Newport brought them Copper and could hurt Thomas Newport (a boy whose name indeed is Thomas Sauadge, whome Capt Newport leaving with Powhatan to learne the Language, at what tyme he presented the said Powhatan with a copper Crowne and other gifts from his Maiestie, sayd he was his sonne) for all his Monnacock that is his bright Sword, and how they could take Symon (for they seldome said our Sirname) Prysoner for all his Tamahauke, that is his Hatchett...

72. Strachey, *Historie of Travell into Virginia*, 59.

73. Smith, *Generall History*, in *Complete Works*, 2: 246-47.

74. Smith, *Generall History*, in *Complete Works*, 1: 13

75. Smith, *Generall History*, in *Complete Works*, 2: 178. For Native American soundways later in the colonial period and in other parts of North America (which shared many of the traits discussed here) see Rath, "Early American Soundways."

76. Strachey, *Historie of Travell into Virginia*, 59.

77. Smith, *Generall History*, in *Complete Works*, 2: 169.

78. Smith, *Generall History*, in *Complete Works*, 2: 293, 296-97, 302-303.

79. Mark M. Smith, *Mastered by the Clock: Time, Slavery, and Freedom in the American South*, Fred W. Morrison series in Southern studies (Chapel Hill: University of North Carolina Press, 1997).

80. Rhys Isaac, "Books and the Social Anthropology of Learning: The Case of Mid-Eighteenth-Century Virginia" in William L. Joyce et al., eds., *Printing and Society in Early America* (Worcester: American Antiquarian Society, 1983), 231, 249.